



# COMPUTER SCIENCE EDUCATION IS URGENT

High-demand, high-wage careers in the fields of Computer Support and Management, Information Systems, and Software and Applications Development are projected to grow in Michigan by an average of 15.7% between 2016 and 2026. This growth will result in 7,000 new jobs paying between \$17/hour and \$73/hour.

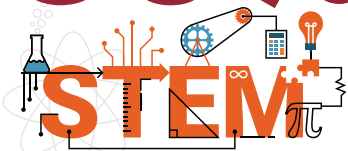
## Addressing the Urgency around Teaching Computer Science

Fewer than half of K-12 schools offer meaningful computer science learning opportunities. Students with the least access are Native American, African American, and Latino; from families with lower socio-economic status; and from rural areas.<sup>2</sup>

**90%** of parents want their child to study computer science, but nationally, only **45%** of high schools offer computer science learning opportunities during the school day.<sup>1</sup>



**50%**



jobs will be in computing occupations, creating more than

**150,000**

job openings annually.

## Solving the Diversity Problem:

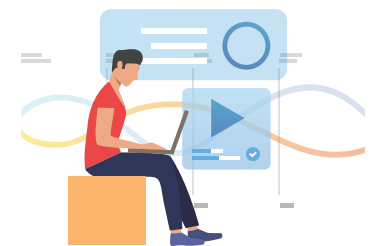
There were 762 female students in Michigan schools (26%) who took an Advance Placement Computer Science exam in 2018, compared to 401 (24%) in 2017.<sup>3</sup>

There were 192 underrepresented minority students in Michigan (7%) who took an AP CS exam in 2018, compared to 87 (5%) in 2017.<sup>4</sup>

In Michigan, only 17% of bachelor's degrees in computer science were earned by females in 2017. Prioritizing equity and diversity requires leaders to focus attention on underserved populations and under-resourced schools. Data clearly show that underrepresented minority students and rural students are less likely to have access to high-quality computer science learning opportunities. If unaddressed, Michigan

will continue to exclude entire populations from this fast-growing field and miss out on the innovations and contributions that diversity promotes.

**70%** of computing occupations are **outside** the information technology industry.



<sup>1</sup> Source: Gallup research study (commissioned by Google) Trends in the State of Computer Science in U.S. K-12 Schools 2016, retrieved from <http://services.google.com/fh/files/misc/trends-in-the-state-of-computer-science-report.pdf>.

<sup>2</sup> Hendrickson, Katie. "Equity in Computer Science Education." k12cs.org, retrieved from [www.k12cs.org/equity-in-computer-science-education/](http://www.k12cs.org/equity-in-computer-science-education/).

<sup>3</sup> "What's Wrong with This Picture?" Code.org, retrieved from [www.code.org/promote](http://www.code.org/promote).

<sup>4</sup> "What's Wrong with This Picture?" Code.org, retrieved from [www.code.org/promote](http://www.code.org/promote).